108 FERC ¶ 61,141
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Pat Wood, III, Chairman;
Nora Mead Brownell, Joseph T. Kelliher,
and Suedeen G. Kelly.

California Independent System Operator Corporation	Docket Nos. ER04-609-000 ER04-609-001 ER04-609-002

ORDER ON TARIFF AMENDMENT NO. 58

(Issued August 5, 2004)

1. In this order, we accept in part and reject in part proposed tariff revisions the California Independent System Operator Corporation (CAISO or ISO) filed as Amendment No. 58 to its open access transmission tariff (ISO Tariff) and order the CAISO to make a compliance filing.[1] This order benefits customers by clarifying certain provisions of the ISO Tariff and by implementing measures to improve market efficiency and enhance communication between the CAISO and market participants.

I. Background

2. On May 1, 2002, the CAISO submitted its Comprehensive Market Design 2002 (MD02) to be implemented in three Phases: Phase 1 - market power mitigation measures, real-time economic dispatch and the use of a single energy bid curve; Phase 2 - an integrated forward market, including an energy market and procedures for procurement of ancillary services; and Phase 3 - implementation of the full network model, redesigned firm transmission rights, and the integration of congestion management with energy and ancillary services markets.

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[1] Concurrent with the issuance of this order, the Commission is issuing an order addressing the CAISO's Amendment No. 54 in Docket No. ER03-1046-001, *et al.*, 108 FERC ¶ 61,142.

3. In an order issued July 17, 2002,[2] the Commission approved certain elements proposed for implementation in Phase 1 and directed the CAISO to hold technical conferences to further develop the longer-term elements of MD02. Specifically, the Commission approved the continued use of a West-wide "must offer" provision, implementation of automatic mitigation procedures, a safety net bid cap set at $250/MWh, a cap on decremental bids set at -$30/MWh, and the use of a single energy bid curve and real-time economic dispatch. The Commission also approved penalties on uninstructed deviation, subject to the condition that the CAISO implement software improvements which would allow more accurate representation of ramp rates at various operating points of a generating unit and would allow real-time communication of a generator's outages, derates, and operating problems.

4. On August 16, 2002, the CAISO filed a request for rehearing of certain aspects of the July 17 Order, including the Commission's decision authorizing the CAISO to implement real-time economic dispatch. In an order issued October 25, 2002,[3] the Commission granted the CAISO's request to delay the implementation of real-time economic dispatch until such time as the CAISO could also impose penalties for uninstructed deviation.

5. To reflect the staged implementation of the market design elements, the CAISO then divided Phase 1 of MD02 into two sub-Phases: Phase 1A, consisting of the market design elements of Phase 1 which had been approved by the Commission without conditions, and Phase 1B, real-time economic dispatch and penalties for uninstructed deviation.

6. On July 8, 2003, pursuant to section 205 of the Federal Power Act (FPA)[4], the CAISO filed with the Commission Amendment No. 54 to the ISO Tariff. The CAISO sought approval for the implementation of the Phase 1B elements of the Real Time Imbalance Energy Market, including approval of Uninstructed Deviation Penalties (UDPs), real-time economic dispatch, and inclusion of multiple ramp rates and other operational constraints into dispatch decisions. The implementation of the Phase 1B elements of the Real Time Imbalance Energy Market would complete the implementation of all the elements of Phase 1 of the CAISO's MD02 that have been approved by the Commission. On October 22, 2003, the Commission accepted in part and rejected in part the ISO Tariff revisions proposed in Amendment No. 54 and ordered the CAISO to make

[2] California Indep. Sys. Operator Corp., 100 FERC ¶ 61,060 (2002) (July 17 Order).

[3] California Indep. Sys. Operator Corp., 101 FERC ¶ 61,084 (2002).

[4] 16 U.S.C. § 824d (2000).

a compliance filing.[5] On November 21, 2003, the CAISO submitted a compliance filing revising substantive provisions of Amendment No. 54, as directed in the October 22 Order (Amendment No. 54 Compliance Filing). On March 11, 2004, the ISO submitted another compliance filing correcting inconsistencies and invalid references in the ISO Tariff and Operating Protocols, as directed in the October 22 Order.

7. On March 2, 2004, as amended March 19, 2004, pursuant to section 205 of the FPA,[6] the CAISO filed as Amendment No. 58 to the ISO Tariff proposed revisions regarding the implementation of a Real-Time Market Application (RTMA) and application of UDPs previously approved by the Commission in the October 22 Order.

8. On June 10, 2004, the Director of Division of Tariffs and Market Development – West issued a letter order pursuant to delegated authority[7] directing the CAISO to submit additional information. On June 17, 2004, the CAISO submitted a response in Docket No. ER04-609-002.

II. Notices, Interventions and Pleadings

9. Notices of the CAISO's filings in Docket Nos. ER04-609-000, ER04-609-001 and ER04-609-002 were published in the *Federal Register*, 69 Fed. Reg. 12,314 (2004); 69 Fed. Reg. 16,538-39 (2004); 69 Fed. Reg. 16,912 (2004); and 69 Fed. Reg. 40,892 (2004). Comments, protests, and interventions were due on June 28, 2004. The parties that filed timely interventions, protests or comments are listed in Appendix A to this order. On April 7, 2004, the CAISO filed an answer (Answer) to the parties' comments and protests listed in Appendix A. On June 29, 2004, Calpine filed an untimely protest with respect to the CAISO's filing in Docket No. ER04-609-002.

III. Discussion

A. Procedural Matters

10. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2004), the timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

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[5] California Indep. Sys. Operator Corp., 105 FERC ¶ 61,091 (2003), *reh'g pending* (October 22 Order).

[6] 16 U.S.C. § 824d (2000).

[7] 18 C.F.R. ¶ 375.307 (2004).

11. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2004), prohibits an answer to a protest unless otherwise ordered by the decisional authority. We will accept the CAISO's Answer because it has provided information that has assisted us in our decision-making process.

B. Incorporation of Operating Constraints into Dispatch Instructions Specification of Minimum Load (Pmin) and Start-Up Lead Time

12. In Amendment No. 58, the CAISO states that it uses a generating unit’s Pmin operating level and start-up lead time in the RTMA software implemented in Phase 1B. It explains that these values can be specified in the master file data used for market transactions for that unit and in the unit’s RMR contract. It states that the data for the same unit characteristics may not be consistent because it can be derived from these two different sources. The CAISO asserts that this disparity needlessly complicates settling RMR and market charges for the same unit.

13. In Amendment No. 54, the CAISO proposed to extend to all RMR generating units an opportunity to amend Schedule A to the RMR contract to use the ramp rate function submitted in the day-ahead market for use in ISO dispatch instructions similar to that proposed for non-RMR participating generating units or elect to use the ramp rates set forth in the applicable RMR contract for both market and RMR purposes. In the October 22 Order, the Commission conditionally approved this proposal.[8]

14. In Amendment No. 58, the CAISO now proposes to provide RMR unit owners the opportunity to revise their RMR contracts to specify that either the values specified in the master file will be used for both RMR and market settlements or to indicate that the values specified in Schedule A to the RMR contract will be used for both RMR and market settlements. The ISO states that this proposal will reduce errors and disputes. It adds that there is no reason for these unit characteristics to be different because a unit is operating in the market as opposed to providing service under the RMR contract. The CAISO also proposes to modify (1) ISO Tariff section 5.11.6.1.2 to indicate that the minimum load level shall be the value specified in Schedule A to the applicable RMR contract and (2) section 6.6 of the Schedules and Bid Protocol to indicate that the start-up lead time shall be the value specified in Schedule A to the applicable RMR contract.

1. Comments

15. The EOB supports the CAISO’s proposal to require that data concerning a generating unit’s Pmin operating level and start-up lead time be reported in the same manner for use in the RTMA software and in the unit’s RMR contract. The EOB states

[8] October 22 Order at P 23.

that this treatment of the data corresponds with the ISO Tariff provision which requires data consistency with respect to a unit's ramp rate.

16. Calpine requests that the Commission reject the ISO's proposal to require RMR owners to use the same values for market transactions for a given generating unit and an RMR agreement. Calpine states that these values may be different because (1) the RMR agreements contain negotiated values which the owner guarantees the RMR unit will be able to meet on a year-round basis, and (2) minimum load and start up times may vary by temperature while the RMR agreement permits only one year-round value to be used. Calpine argues, therefore, that a prudent RMR owner will set forth conservative numbers which the owner is confident can be met routinely rather than the maximum ranges of the unit's operation. Calpine asserts that requiring the RMR owner to use the same values will limit the owner's ability to enter into market transactions or compel the owner to assume the risk that it can operate at maximum values when called upon by the ISO.

17. In its Answer, the CAISO states that it did not propose to mandate that an RMR owner use the values for start-up lead time and minimum load in the RMR contract for its market transactions. It states that instead it proposed to allow an RMR owner to specify in Schedule A that the start-up lead time and Pmin to be used to dispatch and settle RMR transactions will be the same values used to dispatch and settle market transactions.

18. The CAISO adds that, absent some material change in the unit or its operating environment from one moment to the next, there is no reason for using different unit characteristics to settle transactions merely because one transaction is dispatched through the RMR contract and the other through the market. The ISO does not believe that it should accommodate a supplier's desire to offer a risk-differentiated quality of service. Instead, to provide reliable operations, the ISO prefers that the values submitted reflect the unit's ability to perform under any circumstance. The ISO reiterates that its proposed approach for minimum load and start-up lead times was approved by the Commission in the October 22 Order for ramp rates and thus should be approved here.

19. SoCal Edison is concerned that the ISO is using the ISO Tariff to modify or give the RMR generators the opportunity to modify Schedule A to the RMR Agreement. SoCal Edison argues that the *pro forma* RMR Agreement can only be modified by a direct filing with the Commission because it is the result of a Commission-approved settlement among various parties.

20. In its Answer, the CAISO agrees with SoCal Edison that any change to an RMR contract has to be filed with and approved by the Commission, and the CAISO states that it is not attempting to pre-empt this approval process.

2. **Commission Determination**

21. Historically, the CAISO has accommodated different values for a unit's operating characteristics. One value was stated in a unit's RMR contract and another value was stated in the CAISO's Master File. The values contained in Schedule A of the RMR Contract were used to dispatch and settle RMR transactions, and the values contained in the Master File applied to the unit's market transactions. The CAISO now proposes to limit the RMR owner to one set of values for both dispatching and settling RMR transactions and market transactions.

22. We will reject the CAISO's proposal requiring RMR generators to use only one set of values for minimum operating level and start-up lead time. We find convincing Calpine's argument that it is reasonable for an RMR generator to have one set of values in its RMR contract that is achievable on a year-round basis and another set for use in market transactions. Requiring an RMR owner to use the same values will limit the owner's ability to enter into market transactions or will compel the owner to assume the risk that it can operate at maximum values when called upon by the ISO. The CAISO's argument that one set of values is administratively convenient and will reduce the likelihood of errors and disputes is not a compelling reason to limit a RMR generator's flexibility. We therefore direct the CAISO to retain the *status quo* and permit different values for minimum load and start-up lead time as set out in Schedule A of the RMR contract and in the CAISO's Master File.

C. **Uninstructed Deviations Penalties**

Implementation of the UDP to Dynamically Scheduled System Resources

23. In the Amendment No. 54 Compliance Filing, the CAISO proposed in ISO Tariff section 11.2.4.1.2 (b) to apply the UDP to dynamically scheduled system resources. It explained that these units, which are located outside the ISO control area, are functionally equivalent to generating units located inside the ISO control area because the ISO receives real-time operating level signals from those resources. The ISO stated that it did not propose to apply the tolerance band to "static" system resources (*i.e.*, dispatched prior to the hour for the entire hour) because UDP would apply to these resources only if they declined a pre-dispatch instruction issued at least 40 minutes prior to the operating hour. To clarify the distinction between the application of UDP to static and dynamically scheduled system resources, the ISO proposed that the following sentence be added to the definition of tolerance band: "The Tolerance Band shall not apply to System Resources."

24. In Amendment No. 58, the CAISO states that it is concerned that this language could improperly be construed to indicate that UDP are applied to dynamically scheduled system resources but that no tolerance band would be applied to temper the application of

UDP (*i.e.*, any variation from a dispatch instruction would result in a penalty). To clarify this issue, the ISO proposes to modify ISO Tariff section 11.2.4.1.2 (o) to indicate how UDP will be applied to dynamically scheduled system resources in an out-of-market transaction and to limit the application of UDP to a non-dynamically scheduled system resource participating in an out-of-market transaction to under-delivery of the agreed upon energy.

25. The ISO also proposes to modify the definition of tolerance band in Appendix A of the Master Definition Supplement to state that (1) the tolerance band applies to imports from dynamically scheduled system resources based upon the greater of 5 MW or three percent of the resource's maximum output or, in the case of a jointly-owned unit, the relevant ownership share (*i.e.*, Pmax) registered in the master file, and (2) the tolerance band does not apply to non-dynamically scheduled system resources. Finally, the ISO proposes to modify section 2.6.1 of the Settlements and Billing Protocol to clarify that the tolerance band does not apply to non-dynamically scheduled system resources.

26. The ISO adds that the instant changes are intended to resolve the immediate issue of how to establish the tolerance band for dynamically scheduled system resources when Phase 1B is implemented and that the ISO may propose a different basis for the tolerance band for such resources when it files its comprehensive proposal for the treatment of dynamic scheduling.

1. **Definition of Pmax**

a. **Comments**

27. In order to ensure that scheduling coordinators for dynamically scheduled system resources do not unnecessarily incur UDP, Reliant requests that the ISO clarify how it will determine Pmax for the purpose of calculating a system resource's tolerance band.

28. In its Answer, the CAISO states that it generally agrees with Reliant; however, the ISO notes that, for joint ownership in which only part of the output of the facility may be imported to the ISO control area, it is more appropriate to base Pmax on the sum of the ownership or entitlement shares rather than the sum of the physical resource capabilities. The ISO proposes that Pmax be determined as the lesser of the sum of either (1) the net dependable capabilities of the individual generating units or (2) the entitlement shares of the individual generating units making up the system resource.

b. Commission Determination

29. In an order issued on June 29, 2004 accepting dynamic scheduling agreements,[9] the Commission accepted the following definition of Pmax:

> The maximum output (Pmax) of a dynamically scheduled System Resource will be established by agreement between the ISO and the Scheduling Coordinator representing the System Resource on an individual case basis, taking into account the number and size of the generating resources, or allocated portions of generating resources, that comprise the System Resource.

Since the Commission accepted this definition of Pmax, the CAISO's proposal has been superceded by the June 29 Order, and Reliant's concerns have been adequately addressed.

2. Use of Scheduling and Logging Program

a. Comments

30. Reliant also requests that the ISO clarify that scheduling coordinators for dynamically scheduled system resources, which will be subject to the same UDP as in-state resources, will have the same ability as in-state resources to make entries in the ISO's computer-based scheduling and logging program (SLIC) to avoid incurring UDP. Reliant requests that the ISO modify ISO Tariff section 11.2.4.1.2 (p) to include dynamically scheduled system resources.

31. In its Answer, the CAISO clarifies that, because it has proposed to treat dynamically scheduled system resources as generating units internal to the ISO control area for the purpose of assessing UDP, scheduling coordinators for dynamically scheduled system resources will have the ability to notify the ISO of outages for those resources through SLIC as if the resources were generating units within the ISO control area. It states that, if a resource is unable to meet its hour-ahead schedule due to a real-time outage, the scheduling coordinator will be able to avoid UDP that might be incurred due to the outage by notifying the ISO of that outage via SLIC within thirty (30) minutes of the onset of the outage. It adds that dynamically scheduled system resources will be able to report any real-time transmission curtailments that may affect their dynamic energy schedules. The ISO proposes to amend ISO Tariff section 11.2.4.1.2 (p) to clarify these points.

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[9] California Indep. Sys. Operator Corp., 107 FERC ¶ 61, 329 (June 29 Order).

b. Commission Determination

32. The CAISO has adequately addressed Reliant's concerns by clarifying that scheduling coordinators for dynamically scheduled system resources will have the same ability as generating units in the CAISO control area to notify the CAISO of outages through SLIC. We accept this clarification and direct the CAISO to amend its ISO Tariff accordingly.

3. Out-of-Market Transactions from Dynamically Scheduled System Resources

a. Comments

33. Reliant requests that the ISO clarify that, under the proposed modification to ISO Tariff section 11.2.4.1.2 (o), non-delivery or over-delivery of out-of-market energy occurs when a dynamically scheduled system resource operates outside of the tolerance band. Reliant argues that, in order to avoid confusion, ISO Tariff section 11.2.4.1.2 (o) should be consistent with ISO Tariff sections 11.2.4.1.1(l), (m), which impose UDP on energy generated outside the tolerance band.

34. In its Answer, the CAISO clarifies those sections by proposing that UDP apply to out-of-market transactions from dynamically scheduled system resources if the delivered energy differs from the agreed-upon energy by more than the tolerance band. It notes that the tolerance band does not apply to non-dynamically scheduled system resources and therefore UDP would apply to any agreed-to energy from an out-of-market transaction that a non-dynamically scheduled system resource fails to deliver. The ISO proposes modifications to ISO Tariff section 11.2.4.1.2 (o) to clarify these points.

b. Commission Determination

35. The CAISO has satisfactorily modified ISO Tariff section 11.2.4.1.2 (o) to clarify that UDP will apply to out-of-market transactions from dynamically scheduled system resources if the delivered energy differs from the agreed-upon energy by more than the tolerance band, just as UDP would be applied to resources within the CAISO control area. We accept this clarification and direct the CAISO to amend ISO Tariff section 11.2.4.1.2 (o) to clarify this point.

4. Dynamically Scheduled Imports Delivered by a Qualifying Facility

a. Comments

36. SoCal Edison argues that UDP should not be applied to dynamically scheduled imports delivered by a qualifying facility (QF) under an existing contract with a utility. It states that QFs are typically exempted from UDP because, among other things, the utility receiving power under the contract with the QF does not have the ability to control the output of the units.

37. In its Answer, the CAISO responds that, since it proposed a blanket exemption in Amendment No. 54 for QFs that have not signed a Participating Generator Agreement (PGA), it agrees that energy from dynamically scheduled system resources which are QFs that are not under a PGA should be exempt from UDP.

b. Commission Determination

38. The CAISO agrees with SoCal that energy from dynamically scheduled system resources which are QFs that are not under a PGA should be exempt from UDP. We direct the CAISO to revise ISO Tariff section 11.2.4.12 (e) to clarify this point.

5. Action by Control Area Operator

a. Comments

39. Cities/MSR argue that the ISO proposed modification of ISO Tariff section 11.2.4.1.2 (o) goes beyond that described by the ISO. They argue that the modification would result in the assessment of UDP against dynamically scheduled system resources when the agreed upon energy is not delivered or over-delivered, even if that deviation was the result of an action by a control area operator due to a curtailment of firm transmission capability or in order to prevent curtailment of native firm load occurring subsequent to the out-of-market transaction. Cities/MSR propose language to eliminate the distinction between dynamically scheduled and non-dynamically scheduled energy.

40. In its Answer, the CAISO states it did not intend to subject dynamically scheduled system resources to UDP for an out-of-market transaction if any deviation is due to the actions of another control area. It states that deviations from either hourly scheduled system resources or from dynamically scheduled system resources should not be subject to UDP if the deviations are due to the actions of another control area. It proposes a modification to ISO Tariff section 11.2.4.1.2 (o) to clarify this point.

b. <u>Commission Determination</u>

41. The CAISO proposes to modify ISO Tariff section 11.2.4.1.2 (o) to clarify that deviations from either hourly scheduled system resources or from dynamically scheduled system resources should not be subject to UDP if the deviations are due to the actions of another control area. The Commission agrees that this clarification is necessary and directs the CAISO to file this proposed modification.

6. <u>Expected Energy for Out-of-Market Transactions</u>

a. <u>Comments</u>

42. Dynegy/Williams do not protest the ISO's proposed modification to ISO Tariff section 11.2.4.1.2 (o); however, they believe that the revision to this section which they requested in their protest to the ISO's Amendment No. 54 Compliance Filing is still appropriate for the reasons stated therein.[10] They recommended that the first sentence of that section be modified to read: "The Uninstructed Deviation Penalty shall not apply to any excess Energy delivered from or any shortfall of Energy not delivered from an Out of Market (OOM) transaction involving a Generating Unit or a System Unit unless the ISO and the supplier have agreed upon the time of, duration of, and the amount of Energy to be delivered in the OOM transaction and the ISO reflects the OOM transaction in its real-time Expected Energy calculations."[11] In its Answer, the CAISO states that it did not oppose this modification and commits to make the modification if the Commission so directs.

b. <u>Commission Determination</u>

43. We direct the CAISO to modify the first sentence of ISO Tariff section 11.2.4.1.2 (o) as suggested by Dynegy/Williams to read: "The Uninstructed Deviation Penalty shall not apply to any excess energy delivered from or any shortfall of Energy not delivered from an Out of Market (OOM) transaction involving a Generating Unit or a System Unit unless the ISO and the supplier have agreed upon the time of, duration of, and the amount of Energy to be delivered in the OOM transaction and the ISO reflects the OOM transaction in its real-time Expected Energy calculations." This modification will ensure that UDP applies only to OOM transactions that are fully specified and reflected in the CAISO's automated real-time instructions and its Expected Energy calculation.

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[10] *Citing* Joint Protest to California Independent System Operator Corporation's Compliance Filing submitted on December 12, 2003 in Docket No. ER03-1046-002 at 17.

[11] *Id.*

7. Comprehensive Dynamic Scheduling Proposal and Tolerance Band

a. Comments

44. Cities/MSR and TANC request that the Commission take note that the CAISO's proposal to apply UDP to imports from dynamically scheduled system resources in the same way as UDP is applied to generating units located inside the ISO control area is meant to be a temporary measure. They also state that the ISO must ensure that the issue of how the tolerance band will be applied to system resources will be fully explored and addressed in the current stakeholder process. In its Answer, the CAISO agrees that any changes put into effect through Amendment No. 58 should be superseded by the changes proposed through a comprehensive implementation of dynamic scheduling principles.

b. Commission Determination

45. In the June 29 Order accepting dynamic scheduling agreements,[12] the Commission deferred a determination on the tolerance band to an order in this proceeding. Accordingly, it is not necessary that we treat this proposal as a temporary measure pending action on the comprehensive principles filed in that proceeding.

46. We will accept the CAISO's proposal to apply UDP to imports from dynamically scheduled System Resources the same way UDP applies to Generating Units located inside the CAISO control area. We will accept the CAISO's new definition of Tolerance Band as it applies to dynamically scheduled System Resources. The Tolerance Band will be the greater of 5 MW or 3 percent of a maximum output value that would be expressly indicated in the Master File for that particular dynamically scheduled System Resource.

D. Market Clearing Price (MCP)

Constrained Output Resources

47. In Amendment No. 54, the CAISO proposed that Constrained-Output Resources be eligible to set the MCP only for such dispatch intervals when the resource is the marginal unit dispatched to serve Load. It proposed that, in any interval in which *no portion* of such a unit's output is needed, but due to constraints the unit is still providing energy, the unit would not set the MCP but would receive an uplift payment if its bid is above the MCP. In the October 22 Order, the Commission agreed with the CAISO's proposal to permit constrained output resources to set the MCP for those Dispatch

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[12] June 29 Order, 107 FERC at P 15.

Intervals in which *any* portion of such a unit's output is needed by the CAISO to meet real-time load.

48. In Amendment No. 58, the CAISO proposes the following new definition of "Constrained Output Generation"(COG) which mirrors the description the Commission used in the October 22 Order:[13] "[g]enerating resources that cannot easily or economically change load levels and are typically restricted to generating at their full capacity for their unit-specific minimum run time." However, in Amendment No. 54, the CAISO had submitted a more detailed definition of COG in proposed ISO Tariff section 2.5.23.2.1.2.

49. In its June 17, 2004 response to the letter order requesting clarification issued on June 10, 2004 in this proceeding, the CAISO submitted a revised definition of COG to reconcile the two disparate definitions. The new, proposed definition of COG is as follows: "Generating resources with only two viable operating states: (a) off-line or (b) operating at their maximum output level." The CAISO also proposes the following change to ISO Tariff section 2.5.23.2.1.2 regarding eligibility for a resource to set the Dispatch Interval *Ex Post* Price: "Constrained Output Generation that has the ability to be committed or shut off within the two-hour time horizon of the Real Time Market will be eligible to set the Dispatch Interval Ex Post Price if any portion of its Energy is necessary to serve Demand."

1. <u>Comments</u>

50. In its protest to Amendment No. 58, Calpine argues that the term "Constrained Output Resources" is not utilized in the ISO Tariff as claimed, and, therefore, it is unnecessary to include such a definition in the ISO Tariff. It adds that, while ISO Tariff section 2.5.23.2.1.2 distinguishes among resources based upon objective operating limits, the proposed definition of "Constrained Output Resources" does not rely on operating limits or other technical criteria. In its Answer, the CAISO states that it inadvertently omitted the definition in Amendment No. 58. It states that it corrected this omission in its March 19, 2004 errata filing that included proposed language defining COG.

51. Calpine also asserts that the proposed definition is vague and ambiguous because it is based upon subjective criteria such as whether a generating resource can "easily" or "economically" change load levels and does not explain the meaning of "typically restricted." Calpine argues that a revised definition which relies on objective operating criteria and recognizes the operating constraints of combined cycle combustion turbines should be re-submitted once the ISO proposes to use the term in the ISO Tariff.

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[13] October 22 Order at P 70.

52. In its Answer, the CAISO acknowledges that the definition was intended to encompass only simple-cycle combustion turbines which typically are either off-line or operating at full load. The ISO states that through this definition it seeks to allow such simple-cycle units to be eligible to set the MCP. It explains that, unlike combined cycle resources that have some ability to vary output and thus the opportunity to set marginal price, simple-cycle block-loaded resources whose output is not continuously variable would be unable to set the marginal price without some accommodation. Until a model for representing the particular characteristics of combined cycle facilities is developed, the ISO urges the Commission to adopt the proposed definition to facilitate generating units to set the MCP under the circumstances the Commission approved for the CAISO[14] and other independent system operators.

53. In its protest to the CAISO's June 17, 2004 submittal revising the tariff definition of COG, Calpine states that historically COG units were "typically restricted" to generating at one inflexible output point (*e.g.*, full capacity). Calpine asserts that this limitation is changing with the increased prevalence of combined cycle combustion turbines that have multiple output constraints. Calpine explains that a combined cycle turbine may have several "dead-bands" at which it cannot operate. Calpine states that, currently in making dispatch decisions, the ISO does not incorporate operating data on intermediate "dead-bands" or intermediate ramp rates for combined cycle combustion turbines into its software.

2. <u>Commission Determination</u>

54. In the Commission's June 17, 2004 Order on the CAISO's Comprehensive Market Redesign proposal,[15] the Commission accepted the CAISO's definition of COG which was the same one originally proposed in this proceeding. In that prior order, the Commission determined that the scope and definition of COG should not be expanded beyond simple-cycle, combustion turbine units.

55. We will accept the CAISO's revised definition of COG as described in its June 17, 2004 response. We are not persuaded that the scope and definition of COG should be expanded at this time. We make this finding without prejudice to future reconsideration of the definition of COG being expanded when a model for representing the particular characteristics of combined cycle facilities is developed. We direct the CAISO to incorporate into its Phase 1B dispatch software operating data on intermediate dead bands and intermediate ramp rates for combined cycle combustion turbines, or provide a full explanation of why this should not be done, and the date when it would be implemented.

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[14] *Citing* October 22 Order at P 75.

[15] California Indep. Sys. Operator Corp., 107 FERC ¶ 61,274 at P 121.

56. The CAISO's proposed change regarding the eligibility for a resource to set the Dispatch Interval *Ex Post* Price in ISO Tariff section 2.5.23.2.1.2 limits a COG unit's ability to set the MCP by stating that the COG unit has to be committed or shut off within the two-hour time horizon of the Real Time Market. We direct the CAISO to provide a further explanation of why the two-hour time horizon is necessary and how many and what percentage of the total COG units would fall under this two-hour time limitation.

E. Minimum Load Cost Compensation (MLCC)

Revocation of MLCC

57. In Amendment No. 54, the CAISO proposed to monitor a resource's energy production on a Settlement Interval basis and revoke: (1) MLCC during a Waiver Denial Period when Energy production in a Settlement Interval varies by more than the Tolerance Band; or (2) MLCC and bid cost recovery in a Settlement Interval when Energy within that interval varies from the total expected output by more than the Tolerance Band.

58. In the October 22 Order, the Commission rejected the CAISO's proposal not to compensate a must-offer generator for either minimum load costs or bid costs for energy dispatched above minimum load when it generates outside of the tolerance band within a settlement interval.[16] The Commission found that the proposed language revoking payment for minimum load costs contravened its directive that the CAISO must compensate a generator under the must-offer obligation for that generator's minimum load costs.[17] The Commission further found that the CAISO's proposed ISO Tariff language which would deny bid cost recovery to a must-offer generator whose energy output varies from its expected output by more than the tolerance band was unacceptable because it was inconsistent with the proposal for UDPs which are assessed only against energy generated outside of the tolerance band.[18]

59. In the Amendment No. 54 Compliance Filing, the CAISO proposed to revise ISO Tariff section 11.2.4.1.1.1 to include language which states that "[t]he Tolerance Band requirement will not apply to Must-Offer Generators that produce a quantity of energy at [or] above minimum load due to an ISO Dispatch Instruction." In Amendment No. 58, the CAISO states that that proposed language could be interpreted to waive the

[16] October 22 Order at P 107.

[17] *Id.* (*citing* San Diego Gas & Elec. Co. v. Sellers of Energy and Ancillary Services, 102 FERC ¶ 61,285 (2003)).

[18] *Id.*

application of the tolerance band and assure bid cost recovery in any interval in which the ISO dispatched Imbalance Energy, including those intervals outside of waiver denial periods regardless of the manner in which the unit performed in that interval. It states that it is reasonable to apply the tolerance band to condition the recovery of bid costs outside of a waiver denial period. It adds that providing bid cost recovery when a resource fails to follow dispatch instructions will dilute the incentive to follow dispatch instructions. Therefore, the ISO proposes to modify ISO Tariff section 11.2.4.1.1.1 to clarify that (1) the ISO will not condition bid cost recovery or payment of minimum load costs using the tolerance band when the unit is dispatched while it is operating under the must-offer obligation (*i.e.*, during a waiver denial period), and (2) the ISO will not guarantee bid cost recovery if the unit deviates outside of the tolerance band when it is not operating under the must-offer obligation (*i.e.*, outside of a waiver denial period). Thus, the ISO proposes to apply UDP to energy provided outside of the tolerance band during a waiver denial period.

60. The CAISO also proposes to modify ISO Tariff section 11.2.4.1.1.1 to: (1) correct a grammatical error in which the words “did not” were misplaced; (2) replace the undefined term “Curtailable Load” with the proper, defined term “Curtailable Demand;” and (3) clarify in the third sentence how the tolerance band will be applied.

61. Finally, the ISO proposes to modify section 2.6.1 of the Settlements and Billing Protocol to clarify that the tolerance band does not apply to condition bid cost recovery or minimum load cost compensation but does apply for the application of UDP during a waiver denial period.

1. Resource Failure to Follow Dispatch Instruction and Energy Outside of Tolerance Band During Waiver Denial Period

a. Comments

62. Duke argues that the CAISO’s assertion that “[p]roviding bid cost recovery when a resource fails to follow Dispatch Instructions will dilute the incentive to follow Dispatch Instructions”[19] is directly contradicted by the ISO’s admission that the Commission’s October 22 Order found “that the application of UDP (as governed by the Tolerance Band) is sufficient to ensure compliance with Dispatch Instructions without also putting . . . Bid Cost Recovery at risk due to non-compliance with a Dispatch Instruction.”[20] Duke asserts that the ISO’s proposal is not just and reasonable and should be rejected because the ISO has not provided any evidence to rebut the Commission’s

[19] CAISO Amendment No. 58 Transmittal Letter at 3.

[20] *Id.* at 4.

finding that UDPs alone are sufficient to ensure compliance with CAISO dispatch instructions.

63. In its Answer, the CAISO states that the quoted language of the October 22 Order must be read in the appropriate context. It states that a unit is not entitled to MLCC outside of the waiver denial period because, if it were, any unit that wanted the ISO to pay MLCC would simply start-up and operate at minimum load whether or not the ISO had denied its waiver. The ISO states that the Commission was not permitting the ISO to deny MLCC or bid cost recovery to a unit operating during a waiver denial period. It adds that the context for the Commission's directive must be a unit operating outside of a self-commitment period during a waiver denial period because a unit is not entitled to MLCC during a self-commitment period. The ISO argues that it is necessary to require a unit to operate within the tolerance band to prevent a resource from earning money for non-performance and that at times UDP may not be sufficient to discourage a resource from failing to comply with a dispatch instruction. It states that a resource can be paid for not performing due to the fact that the ISO settles imbalance energy and provides bid cost recovery based on the instruction but applies UDP based upon the delivery.

64. Dynegy/Williams argue that the Commission should reject the ISO clarification that the ISO will apply UDP to energy provided outside of the tolerance band during a waiver denial period. Dynegy/Williams allege that this proposal is contrary to the ISO Governing Board's directive that the ISO needed to clarify that UDP and the tolerance band apply to condition bid cost recovery outside of the waiver denial period.[21] Dynegy/Williams believe that the ISO staff's proposal to the ISO Governing Board which clarified that the tolerance band and UDP are waived when the ISO dispatches imbalance energy during a waiver denial period is appropriate. They argue that, since the waiver-denied must-offer unit is operating at the direction and discretion of the ISO, to require the unit to be subject to UDP risk also violates principles of cost causation and is unreasonable. Dynegy/Williams claim that the ISO should bear the risk that a particular unit may not precisely meet a must-offer dispatch instruction because the ISO requires a unit to be online under the must-offer obligation.

65. In its Answer, the CAISO admits that it did not accurately represent the proposed changes to ISO Tariff section 11.2.4.1.1.1 in its presentation to the ISO Governing Board; however, it stands by the language filed in Amendment No. 58. The ISO states that, as directed by the Commission,[22] the ISO cannot revoke MLCC or bid cost recovery for a unit committed under a waiver denial period and dispatched by the ISO. It argues that, if

[21] Dynegy/Williams Protest at 5 (*quoting* Board of Governors February 26, 2004 Approval of Additional Phase 1B Tariff Amendments).

[22] *Citing* October 22 Order at P 107.

UDPs are not applied during a waiver denial period, it is unclear what incentive the unit will have to follow the ISO's dispatch instructions. The ISO contends that Dynegy/Williams are arguing for two sets of performance standards: one set to be applied when the owner wants the unit to be operating and another less stringent set to be applied when the unit is operating due to a reliability requirement. The ISO states that this argument ignores that a unit does not differentiate between operating for a market transaction or under a reliability requirement and that there is no difference in the effect on the ISO's control area operations from an uninstructed deviation from a unit operating at an owner's instruction or a reliability requirement. It concludes that, in order to encourage compliance with dispatch instructions, UDP should apply even if the unit is operating during a waiver denial period.

b. Commission Determination

66. We reject Dynegy/Williams arguments that UDP should not apply to energy provided outside of the tolerance band during a waiver denial period. It is reasonable for must-offer generators to have the incentive to avoid a potential UDP by operating in compliance with the CAISO's dispatch instructions. Therefore, we will accept the CAISO's clarification to apply UDP to energy provided outside of the tolerance band during a waiver denial period. Our determination is consistent with our concurrently issued order in which we find that "the CAISO correctly interprets the Commission's October 22 Order as holding that 'the application of UDP (as governed by the Tolerance Band) is sufficient to ensure compliance with Dispatch Instructions without also putting MLCC and Bid Cost Recovery at risk due to non-compliance with a Dispatch Instruction.'"[23]

67. However, we will reject the CAISO's proposal to eliminate bid cost recovery payments for non-must-offer resources operating outside the tolerance band amount of the Dispatch Operating Point. In a concurrently issued order, we find "unconvincing the CAISO's argument . . . that UDP would not be a sufficient deterrent to generators who could choose not to perform at all and still receive compensation. The Commission has put into place market behavior rules[24] which, in combination with vigilant market monitoring and UDP, should be more than adequate safeguards against this type of behavior."[25]

[23] California Indep. Sys. Operator Corp., 108 FERC ¶ 61,141 at P 71 (2004) (Docket No. ER03-1046-001, *et al.*).

[24] *Id.* (*citing* Investigation of Terms and Conditions of Public Utility Market-Based Rate Authorization, 107 FERC ¶ 61,175 (2004)).

[25] *Id.*

2. Bid Cost Recovery for Dynamically Scheduled System Resources

a. Comments

68. Reliant states that the CAISO has failed to modify ISO Tariff section 11.2.4.1.1.2 and section 2.6.3 of the Billing and Settlement Protocol to condition bid cost recovery for dynamically scheduled system resources. Reliant requests that the ISO clarify whether this omission was intentional. In its Answer, the ISO agrees that dynamically scheduled system resources should be provided bid cost recovery but does not agree that the sections Reliant cites should be modified. Instead, the ISO proposes to include dynamically scheduled system resources in the first sentence of ISO Tariff section 11.2.4.1.1.1, in the title and first sentence of section 2.6 to Appendix D to the Settlements and Billing Protocol, and in the first sentence of section 2.6.1 of Appendix D to the Settlements and Billing Protocol.

b. Commission Determination

69. We will accept the CAISO's proposed changes to ISO Tariff section 11.2.4.1.1.1 and to sections 2.6 and 2.6.1 of Appendix D to address Reliant's concerns pertaining to dynamically scheduled system resources.

3. Amendment No. 54 Compliance Filing

a. Comments

70. Dynegy/Williams state that the ISO improperly assumes in Amendment No. 58 that the changes it requested in Amendment No. 54 Compliance Filing have been approved. They request that the Commission not inadvertently approve here the proposed modification to ISO Tariff section 11.2.4.1.1.1 that may have been contested in the Amendment No. 54 proceeding and has not yet been approved.

71. In its Answer, the CAISO states that it did not intend to presume approval of the proposed modification to ISO Tariff section 11.2.4.1.1.1. However, it notes that the proposed changes in Amendment No. 58 are possible and meaningful only if they are made on top of the underlying language proposed in the Amendment No. 54 Compliance Filing. Thus, the ISO requests that, if the Commission accepts the language proposed in Amendment No. 58, it also accept the underlying language.

b. Commission Determination

72. We have reviewed the Amendment No. 54 Compliance Filing in conjunction with the tariff sheets proposed in Amendment No. 58; therefore, we find that intervenors' concerns have been adequately addressed.

F. Effective Date

73. The CAISO seeks an effective date for Amendment No. 58 of the later of 60 days from the date of this filing (*i.e.*, May 1, 2004) or when the Phase 1B modifications are put into effect. The ISO states that it will provide written notice to the market and the Commission at least 10 days prior to the implementation of the Phase 1B modifications.

1. Comments

74. Due to the delays in implementing Phase 1B and the need to ensure readiness through comprehensive simulation and testing, Dynegy/Williams recommend that the Commission modify the 10 day "going live" notice of Phase 1B to require the ISO to certify to the Commission that it has reasonably achieved the goals of software and market testing. Dynegy/Williams add that the Commission should then provide market participants a reasonable period in which to file comments on the ISO's certification. They believe that only after the consideration of the ISO's certification and market participant comments and the Commission's finding that Phase 1B is ready to be implemented will a smooth transition to Phase 1B occur.

75. In its Answer, the CAISO argues that the Dynegy/Williams' request should be denied on procedural and substantive grounds. The ISO states that Dynegy/Williams did not seek rehearing of the 10 day notice requirement and therefore their request for modification is untimely and a collateral attack on the October 22 Order. The ISO adds that the Commission's approval of a 10 day notice requirement, without any other procedures, is consistent with the treatment of changes in previous ISO Tariff amendments.

76. Dynegy/Williams also request that Phase 1B not be implemented prior to October 2004. They believe that its implementation during the peak summer season should be avoided because it will place additional burdens and stresses on the ISO and market participants which may result in significant errors and complications. They point to the operator errors that occurred on March 8, 2004 to underscore the need to avoid introducing major operational changes during the peak summer season.

77. In its Answer, the CAISO agrees that in the past it has generally expressed a preference for delaying the implementation of new software until after the summer peak season. However, it believes that the Phase 1B modifications which impose UDP to

encourage compliance with ISO dispatch instructions and provide for a more optimal real-time dispatch system could argue in favor of not waiting until after the summer peak season to deploy the Phase 1B software. The ISO disputes Dynegy/Williams' implication that the operator error on March 8, 2004 was due to the implementation of new software systems. The ISO also states that, based upon the fact that UDP have not been tested in the market simulation conducted for the Phase 1B implementation and other market participant feedback, the ISO is evaluating whether to implement the RTMA software and initially suspend settling UDP for some fixed period of time. Instead, the ISO would provide market participants with the MWh quantities of UDP that would have applied during this initial period. The ISO requests that, if it seeks and the Commission grants a trial period for UDP, the Commission not nullify the program by extending the trial period indefinitely.

2. Commission Determination

78. We agree with the CAISO that the provisions of Amendment No. 58 should be put into effect when the Phase 1B modifications are put into service. We direct the CAISO to provide written notice to the market and to the Commission at least 10 days in advance of the implementation of the Phase 1B modifications.

G. Compliance Filing

79. We direct the CAISO to submit a compliance filing within 30 days of the date of this order with the revisions and responses to questions directed herein.

The Commission orders:

(A) The CAISO is hereby directed to submit a compliance filing, as discussed in the body of this order, within 30 days of the date of this order.

(B) The CAISO's proposed tariff changes, as modified in Ordering Paragraph (A), are hereby accepted for filing, without suspension or hearing, to become effective 10 days after the CAISO provides notice to the Commission and Market Participants that the software necessary to implement these tariff changes is ready for implementation.

By the Commission.

(S E A L)

Linda Mitry,
Acting Secretary.

Appendix A

Motions to Intervene, Protests, and/or Comments

California Electricity Oversight Board (EOB)
California Municipal Utilities Association
Calpine Corporation (Calpine)
Cities of Redding, Santa Clara, and Palo Alto California, and the M-S-R Public Power Agency (Cities/MSR)
Cogeneration Association of California and the Energy Producers and Users Coalition
Duke Energy North America LLC and Duke Energy Trading and Marketing L.L.C. (collectively, Duke)
Dynegy Power Marketing, Inc.; El Segundo Power, LLC; Long Beach Generation LLC; Cabrillo Power I LLC; Cabrillo Power II LLC; and Williams Power Company, Inc. (collectively, Dynegy/Williams)
Metropolitan Water District of Southern California
Modesto Irrigation District
Northern California Power Agency
Powerex Corp.
Reliant Energy Power Generation, Inc. and Reliant Energy Services, Inc. (collectively, Reliant)
Sacramento Municipal Utility District
Southern California Edison Company (SoCal Edison)
The Transmission Agency of Northern California (TANC)